UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,092,924 B1 Page 1 of 2

APPLICATION NO.: 10/086988

DATED: August 15, 2006

INVENTOR(S): Mark D. Levedahl

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 5:

Line 38, after "of these subject to:" delete " $m \le n \le N$ " and insert -- $m \le n \le N$ --.

Column 6:

Line 19, delete Equation (5) and insert -- $\forall (i \neq j \ and \ a(j) > 0)$ --.

Line 27, delete Equation (6) and insert

$$P_{a} = \frac{e^{-\bar{x}^{T}R^{-1}\bar{x}/2}}{(2\pi)^{M/2}\sqrt{|R|}} \prod_{i}^{m} \frac{e^{-\left[A_{i} - B_{a(i)} - \bar{x}\right]^{n}\left(P_{i} + Q_{a(i)}\right)^{-1}\left[A_{i} - B_{a(i)} - \bar{x}\right]/2}}{(2\pi)^{M/2}\sqrt{|P_{i} + Q_{a(i)}|}}$$

-- --

Column 8:

Line 19, delete Equation (11) and insert

$$g = 2 \ln \left[\frac{\beta_{l} P_{TA} P_{TB}}{(2\pi)^{M/2} P_{NTA} P_{NTB}} \right]$$

$$P_{NTA} = \beta_{l} P_{TB} (1 - P_{TA}) + \beta_{FTB}$$

$$P_{NTB} = \beta_{l} P_{TA} (1 - P_{TB}) + \beta_{FTA}$$

Line 39, delete Equation (12) and insert

$$\delta f_{i}^{2} = \left[A_{i}^{f} - B_{a(i)}^{f} \right]^{T} \left(F_{i,a(i)} \right)^{-1} \left[A_{i}^{f} - B_{a(i)}^{f} \right] + \ln \left(F_{i,a(i)} \right)$$

$$J_{af} = -\overline{x}^{T} R^{-1} \overline{x} - \ln \left[(2\pi)^{M} |R| \right] - \sum_{i=1}^{m} \left\{ \frac{\delta x_{i}^{T} S_{i}^{-1} \delta x_{i} + \ln \left[|S_{i}| \right] + \delta f_{i}^{2}}{g} \quad a(i) \neq 0 \right\}$$

Column 8:

Line 53, after "make k assignments," delete " $0 \le k \le m$ " and insert -- $0 \le k \le m$ --.

Signed and Sealed this

Fourteenth Day of September, 2010

David J. Kappos Director of the United States Patent and Trademark Office

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CERTIFICATE OF CORRECTION (continued) U.S. Pat. No. 7,092,924 B1

Column 9:

Line 53, delete Equation (17) and insert

$$J_{s} - \overline{x}^{T} R^{-1} \overline{x} - \sum_{i=1}^{s} \left\{ \delta x_{i}^{T} S_{i}^{-1} \delta x_{i} + \ln \left[\left| S_{i} \right| \right] - \ln \left(d_{\min} \right) \quad a(i) \neq 0 \\ \overline{g} \qquad \qquad a(i) = 0 \right\} + \left\{ \ln \left[\left[2\pi \right]^{M} \left| R \right| \right) \quad n_{a} = 0 \\ 0 \qquad \qquad n_{a} > 0 \right\}$$

Column 12:

Line 22, after "where" delete " $k_g \ge 1$ " and insert -- $k_g \ge 1$ --.

Line 56, delete Equation (18) and insert

$$P_{i} = P_{i} + R$$

Column 14:

Line 58, Claim 2, after "associated input" delete "are" and insert -- arc --.

Column 15:

Line 8, Claim 5, delete the equation found after "the cost function is" and insert

$$J_{s} - \overline{x}^{T} R^{-1} \overline{x} - \sum_{i=1}^{s} \left\{ \delta x_{i}^{T} S_{i}^{-1} \delta x_{i} + \ln \left[\left| S_{i} \right| \right] - \ln \left(d_{\min} \right) \quad a(i) \neq 0 \\ \overline{g} \qquad a(i) = 0 \right\} + \left\{ \ln \left(\left[2\pi \right]^{M} \left| R \right| \right) \quad n_{a} = 0 \\ 0 \qquad n_{a} > 0 \right\} \quad -.$$

Column 16:

Line 20, Claim 16, delete the equation found after "the cost function is" and insert

$$J_{s} - \overline{x}^{T} R^{-1} \overline{x} - \sum_{i=1}^{s} \left\{ \delta x_{i}^{T} S_{i}^{-1} \delta x_{i} + \ln \left[\left| S_{i} \right| \right] - \ln \left(d_{\min} \right) \quad a(i) \neq 0 \\ a(i) = 0 \right\} + \left\{ \ln \left(\left[2\pi \right]^{M} \left| R \right| \right) \quad n_{a} = 0 \right\} \\ n_{a} > 0 \right\}$$

Column 16:

Line 42, Claim 17, after \overline{X} , delete "o the cost" and insert -- of the cost --.

Column 17:

Line 34, Claim 27, delete the equation found after "the cost function is" and insert

$$J_{s} - \overline{x}^{T} R^{-1} \overline{x} - \sum_{i=1}^{s} \left\{ \delta x_{i}^{T} S_{i}^{-1} \delta x_{i} + \ln \left\| S_{i} \right\| - \ln \left(d_{\min} \right) \quad a(i) \neq 0 \\ a(i) = 0 \right\} + \left\{ \ln \left(\left[2\pi \right]^{M} |R| \right) \quad n_{a} = 0 \\ 0 \quad n_{a} > 0 \right\}$$

Line 48, after "M=Number of" delete "fist" and insert -- first --.

Line 50, delete the equation after "a=Assignment vector:" and insert -- $a_{(i)} > 0 \rightarrow A_i$ ---.

Line 57, Claim 29, delete the equation found after "the cost function is" and insert

$$J_{s} - \overline{x}^{T} R^{-1} \overline{x} - \sum_{i=1}^{s} \left\{ \delta x_{i}^{T} S_{i}^{-1} \delta x_{i} + \ln \left[|S_{i}| \right] - \ln \left(d_{\min} \right) \quad a(i) \neq 0 \\ \overline{g} \qquad \qquad a(i) = 0 \right\} + \left\{ \ln \left[\left[2\pi \right]^{M} |R| \right) \quad n_{a} = 0 \\ 0 \qquad \qquad n_{a} > 0 \right\}$$